Supplementary File 1

Author/year	Study Location	Study Design/Study Aim	Number/Age of Participants	Analysis	Main Themes of TMC, HIV risk, Impacts on Men and Their Families
Douglas, et al., 2018 [1]	Eastern Cape, South Africa	(i) Mixed method design (ii) Methods:	(i) Number of participants • 1036 men (ii) Participant age • 12-18 years old	Thematic analysis Descriptive statistics	TMC and HIV risk (i) TMC TMC as a cultural practice Reasons to undergo TMC (ii) HIV Risk Initiates have no knowledge on TMC and HIV transmission Initiates have no opportunities to talak about TMC and HIV risks
Greely, 2013 [2]	South Africa	(i) Qualitative design (ii) Method: FGD (iii) Aim: • to understand the importance of male circumcision as a risk-reducing strategy by exploring perceptions of young men and women	(i) Number of participants 15 participants (10 men and 5 women) (ii) Participant age 15 years and above	Thematic Analysis	TMC, HIV risk, impacts on men and their families (i) TMC • TMC as a rite of passage to adulthood • TMC defines being a 'real' man • Traditional initiates receive teaching and guidance from elders • Initiates received more respects • To fulfill or live up to cultural expectations (ii) HIV risk • Initiates were taught to have sexual intercourse • Initiates were keen to prove manhood with unprotective sex intercourse

					The belief that TMC reduced risk of HIV transmission (iii) Impacts Uncircumcised men were subject to stigma, discrimination, and disrespect Uncircumcised men were haunted by bad luck Women believed traditionally circumcised men are more responsible and less abusive
Gwata, 2009 [3]	Xhosa, South Africa	(i) Qualitative design (ii) Method: interview (iii) Aim • to explore the socio-cultural perceptions of Xhosaspeaking men on traditional male circumcision	(i) Number of participants	Thematic analysis	TMC and HIV risk (i) TMC TMC as an agent of socialization within community TMC tests man's ability to endure pain Initiates experienced social pressure to undergo TMC (ii) HIV risk Lack of knowledge on TMC and HIV transmission
Kelly, et al., 2012 [4]	Papua New Guinea	(i) Qualitative design (ii) Method:	(i) Number of participants 276 men (51 men underwent TMC) 210 women (ii) Participant age Not reported	Thematic analysis	TMC, HIV risk, impacts on men and their families (i) TMC TMC is a compulsory practice TMC is sacred and secret practice (ii) HIV risk Reusing of non-sterile cutting equipment Lack of knowledge of risk of non-sterile equipment and HV transmission (iii) Impacts

Supplemental material

					 Uncircumcised men felt stigmatized, ridiculed, and mocked Family members of uncircumcised
					men were looked down within the community
Lagarde, et al., 2003 [5]	South Africa	(i) Quantitative design:	(i) Number of participants • 482 men (108 underwent TMC) and 302 women (ii) Participant age • 19-29 years	Multivariate analysis	HIV risk and impacts on men (i) HIV risk Circumcised men did not need to use condoms The belief that TMC protected against HIV transmission Initiates had sex during healing period (ii) Impacts TMC proved manhood Initiates obtained respect from peers
Malisha et al., 2008 [6]	Limpopo, South Africa	(i) Qualitative design (ii) Method: interview (iii) Aim • to investigate the role and significance of traditional initiation schools from the perspectives of young people in Venda, a part of South Africa where initiation schools, for some young people, still form an important part of the rite of passage to adulthood.	(i) Number of participants • 17 men and 17 women (ii) participant age • 13-20 years	Thematic analysis	and women TMC, HIV risk and impacts on men (i) TMC TMC prepares initiates to be a 'real' man Initiation school is important for socialization (ii) HIV risk Initiation schools encouraged initiates to engage in sexual activities Lack of information on HIV and condom use during initiation school Initiates engaged in sexual intercourse without a condom Traditional healers did not use sterilised equipment. (iii) Impacts

					 Uncircumcised men experienced rejection Uncircumcised men were considered not a 'real' man, irresponsible
Mavundla, et al., 2009 [7]	Xhosa, South Africa	(i) Qualitative design (ii) Method: interview (iii) Aim • to explore and describe Xhosa beliefs and practices regarding cultural male circumcision ritual in the Eastern Cape Province in South Africa to support nurses in providing culturally competent care	(i) Number of participants 25 men (ii) participant age Not reported	Thematic analysis	TMC and impacts on men (i) TMC Process of TMC TMC as a sacred and secret cultural practice TMC did not allow initiates to seek for medical treatment Expectation following being traditionally circumcised TMC connects initiates with ancestors (ii) impacts Uncircumcised men experienced rejection and negative labeling Circumcised men obtained respect
Mavundla, et al., 2010 [8]	East London, South Africa	(i) Qualitative design (ii) Method: interview (iii) Aim to describe the experience of newly initiated Xhosa men in East London, South Africa	(i) Number of participants • 14 men (ii) participant age • 15-20 years	Thematic analysis	TMC and impacts on men (i) TMC TMC as a cultural practice (ii) impacts Uncircumcised men experienced stigma rejection by family, community, peers, opposite sex Uncircumcised men experienced lack of respect
Mboera et al., 2009 [9]	Tanzania	(i) Quantitative design: Cross sectional study (ii) Aim to underscore challenges and opportunities for the involvement of traditional	(i) Number of participants • 324 men and 277 women (ii) participant age • 12-45 years	Thematic analysis	TMC, HIV risk, and impacts on men and their families (i) TMC • TMC as a cultural practice • Reasons to undergo TMC (ii) HIV risk

		practitioners in scaling up safe male circumcision as a measure to support global efforts of preventing HIV transmission			Using the same knife to circumcise several initiates Lack of knowledge of the possibility of HIV transmission through TMC iii) impacts Uncircumcised men were segregated by community Uncircumcised men experienced lack of respect
Mpateni, et al., 2020 [10]	Alice, Eastern Cape, South Africa	(i) Qualitative design (ii) Method: FGD (iii) Aim • to examine the health hazards associated with the contemporary traditional circumcision rite in Alice, Eastern Cape, South Africa	(i) Number of participants • 23 male and 2 female (ii) participant age • 18-70 years	Thematic analysis	TMC and HIV risk (i) HIV Risk Initiates have to have sex with several sexually experienced women Unhygienic environment in camp or bush during TMC practices
Mshana, et al., 2011 [11]	North Eastern, Tanzania	(i) Qualitative design (ii) Method: FGD (iii) Aim • to understand how traditionally circumcising communities where MC carries considerable social meaning and significance would respond to male circumcision (MC) program as an additional intervention against HIV infection	(i) Number of participants • 41 men and 50 women (ii) participant age • 18-44 years	Thematic analysis	TMC and impacts on men (i) TMC TMC as a cultural practice Process of TMC Reasons to undergo TMC (ii) impacts Uncircumcised men experienced stigmatization and ridiculing
Munthali, et al., 2007 [12]	Malawi	(i) Qualitative and quantitative design(ii) Method: • Cross sectional survey •interview	(i) Number of participants • 102 men and women (ii) participant age • 12-19 years	Thematic analysis	TMC and HIV risk (i) TMC • TMC as a cultural practice • Reasons to undergo TMC

Supplemental material

				Descriptive	
		 (iii) Aim: quantitative data is used to examine timing of pubertal changes for boys and girls and the extent to which puberty is marked by initiation ceremonies and rites in the country. Quantitative data is used in order to understand how adolescents know about issues relating to sexuality and what meanings they attach to various puberty changes as they experience them. 		statistics	 (ii) HIV risk Initiates had sex without protection Lack of knowledge on TMC and HIV transmission TMC promotes sex adventure for new initiates
Nyembezi, et al., 2014 [13]	Eastern Cape, South Africa	(i) Quantitative design:	(i) Number of participants • 1656 men (ii) participant age • Mean age 21	Logistic regression	TMC and HIV risk (i) HIV risk factors • Initiates had multiple sex partners • Initiates engaged in inconsistent condom use or unprotected sex with multiple sex partners • Belief that TMC protects against HIV and other STIs transmission
Nyembezi, et al., 2009 [14]	Eastern Cape, South Africa	(i) Quantitative design:	(i) Number of participants • 114 men (ii) participant age • 15-32 years	Logistic regression	TMC and HIV risk (i) HIV risk factors • Belief that TMC protects against HIV transmission • Initiates engaged in unprotected sex with multiple sex partners

		of the Eastern Cape Province of South Africa.			
Peltzer, et al., 2009 [15]	Mpumalanga, South Africa	(i) Qualitative design (ii) Method: interview (iii) Aim: • to assess the current behavioural risk reduction messages and HIV/ AIDS education provided by medical and traditional providers of male circumcision • to assess the risk-related behavioural beliefs regarding circumcision, HIV/ AIDS risks, condoms, and gender attitudes among men who have undergone elective medical circumcision and men who have been circumcised in traditional initiation schools in the past 18 months.	(i) Number of participants • 30 men (ii) participant age • 18-30 years	Thematic analysis	(i) TMC TMC as a cultural practice Reasons to undergo TMC (ii) HIV risk Belief that TMC reduces risk of contracting HIV Initiates engaged in sex prior to incomplete wound healing Initiated engaged in inconsistent condom use or unprotected sex with multiple partners (iii) impacts TMC is associated with social status and being respect
Sarvestani, et al., 2012 [16]	Uganda	(i) Qualitative design (ii) Method: FGD (iii) Aim: • to characterize TMC practices in Uganda and the cultural implications	(i) Number of participants • 208 men (ii) participant age • 14-18 years	Thematic analysis	TMC (i) TMC • TMC as a cultural practice • The process of TMC

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Shi, et al.,	Kenya,	(i) Quantitative design	(i) Number of participants	Ordinal	TMC and HIV risk
2019 [17]	Lesotho, Malawi,	Cross sectional study	• 43,222 males	regression	(i) HIV risk • Initiates engaged unprotected sex
	Mozambique, Namibia, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe	(iii) Aim: • to understand the sexual risk behavior of men with traditional male circumcision and medical male circumcision in the context of the World Health Organization's (WHO) campaign for voluntary medical male circumcision (VMMC) scale-up	(ii) participant age ■ 15-49 years		with multiple partners Belief that TMC protects against HIV
Siweya, et al., 2018 [18]	Limpopo, South Africa	 (i) Qualitative design (ii) Method: FGD (iii) Aim: to determine the notions of manhood in TMC by African adolescent boys in Ngove Village, Limpopo Province 	(i) Number of participants • 20 males (ii) participant age • 13-18 years	Thematic analysis	TMC and HIV risk (i) TMC ■ TMC as a cultural practice ■ The role of TMC in role modeling (ii) HIV risk ■ TMC promotes sex adventure for initiates